



Ø BEAT

COLO. SPRINGS,
COLORADO

Rocky Mt. Div. Convention City
June 19-20

MARCH 1971

JOHN LEWIS TO SPEAK, SHOW SLIDES OF ANTARCTIC SOJOURN AS HIGHLIGHT OF MARCH MEETING

Dr. John Lewis, Ph.D in Geology and an instructor at Colorado College in the Springs, one of three scientists who spent 11 weeks on a research expedition in the Antarctic, will be the speaker as the main feature of the March 10 meeting of the PP-RAA at the U. S. Naval Reserve Training Center, Lake and Logan Streets.

During his portion of the March meeting, which starts at 7:30 p.m., Dr. Lewis will tell of his experiences and show slides taken when he and his two fellow scientists were part of a large group of American scientists working for the United States Antarctic Research Program (USARP).

Although five permanent camps were maintained by the United States in the cold continent, an area big enough to hold both Canada and the United States, with room left over, Dr. Lewis and his companions occupied none of these "luxury camps."

They were one of the few groups who spent the time sleeping in tents, travelling by ski mobiles and living essentially isolated from others.

For the most part it was just three men
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MEMBERS HAVE BUSY TIME HANDLING EARTHQUAKE MESSAGES AT RED CROSS

By Rosemarie Lewis, WAØMNL

The California earthquake occurred at 7:01 MST on Tuesday, Feb. 9. WAØVTU the amateur station located at the American Red Cross was activated by WØGCH, George Kowalski, EC, at 11 a.m.

The remainder of Tuesday, only emergency traffic was accepted into the disaster area. Our time was spent listening and taking notes on the damage in each section. This information was passed to Red Cross workers who marked these vital statistics on a large wall map. They used a colored pencil code to note degrees of damage and other conditions.

The band sounded like a dozen field days on one frequency. NCS in California took inquiries by call areas. When our turn came we would list the places Red Cross had received queries about but information was not listed on their map.

Amateurs involved in Tuesday's activities were WØGCH, George Kowalski, EC, WAØERA, Eldon Lewis (who didn't realize then he was to spend the next three working days at the rig); WAØMNL, Rosemarie Lewis; WAØMNM, Linda Vidmar; K3WKV/Ø, Barry Mitchell, and WØSWM, Earl Leonard.

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ZERO BEAT

Published monthly in the interest of the members of the Pikes Peak Radio Amateur Assn., Inc., Colorado Springs, Colorado
Member, Amateur Radio News Service

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1142 Rainier Drive, Colorado Springs 80910

-o-

The PPRAA meets the second Wednesday of each month in the U. S. Naval Reserve Training Center, Lake and Logan Streets, starting at 7:30 p.m. All radio amateurs and other interested persons are invited to attend.

Copy deadline for the APRIL ZERO BEAT is 31 March.

Editorial

IT'S YOUR CLUB - TREAT IT AS SUCH

A recent QSO on an amateur radio band which has been reported to us (we weren't listening at the time so didn't hear it ourselves) in which one of the amateurs was a member of the PPRAA calls for some comment.

It seems, according to the report, that this particular member, evidently disgruntled somehow about the PPRAA and its activities, aired some pretty disparaging views for whoever happened to be listening on that particular frequency. The comments were of such a derogatory nature that we understand they resulted in several discussions between PPRAA members who thought the comments were "out of line."

While there is no limitation (within certain bounds) which prevents an amateur operator from expressing his or her opinion over the amateur bands, it seems to us that before publicizing such opinions about the club, the member would have the courtesy to point out first any PPRAA "shortcomings" in either a meeting of the members or the board of directors.

In our opinion, a PPRAA member, whether he or she be a regular, Novice or an associate member or even an officer, or a member of the board of directors, since he or she voluntarily chose to become a member

BOARD OF DIRECTORS

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-o-

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-o-

ber of the PPRAA, should be interested in promoting the club and its activities, rather than publicly degrading the club and its activities through disparaging remarks over the air.

During its 20 years of existence in this city, the PPRAA has done much to promote Amateur Radio and all activities associated with Amateur Radio.

This has been done by public service through providing communications or supplementary communications in case of emergencies, engaging in communications tests with Civil Defense, Red Cross and other agencies and by providing at various meetings speakers with interesting subjects for members and for whatever members of the "general public" were interested enough in the subject being presented to attend.

There have also been various social events among the members such as picnics and the Christmas dinner last December to bring the members and their families closer together.

If a member of the PPRAA is not interested enough to discuss what he or she feels are the shortcomings of the club with the other members who may be in a position to correct such faults, rather than "airing our dirty wash" on the airwaves, it seems to us that he or she doesn't have the best int-

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Editorial - (Continued from Page 2)

ereests of the club and its activities at heart.

There is nothing mandatory about belonging to the PPRAA. An amateur radio operator does not have to join the club to keep his operator's license valid. The sole purpose of the PPRAA, or any other radio club, is as a voluntary means of associating with other amateurs to promote the art and practice of amateur radio operation through cooperation.

If any member, officer or director is so dissatisfied with the club and its activities that he feels this dissatisfaction must be aired for public consumption, he or she has to take only one very easy step--resign from the club activities so that those who are interested in promoting the club and its activities may continue to do so without his or her verbal or otherwise "interference."

Admittedly, in the past, as we intend to do in the future, we have, in the editorial columns of Zero Beat pointed out what we thought were shortcomings or actions which needed to be changed or corrected for the smooth running and conduct of the PPRAA. However, since Zero Beat, for the most part, is confined in its readership to the members of the PPRAA, our actions have been done with the thought that this was the surest and easiest way of getting

such information to all the members of the PPRAA.

Should, at any time, we publish anything in Zero Beat which members of the PPRAA feel are "out of line," we would, upon being confronted with such an accusation, take immediate steps (perhaps happily because of the work involved in getting Zero Beat out each month) to resign as the editor and hand the task over to some other person whom the club felt would be better fitted to handle the publication.

In a nutshell--if you are interested enough in the club and its future to be a good member, get in and try to help correct and club shortcomings, rather than airing them to the public. If you are not interested enough in the club to act in this fashion, why waste your time--resign from the activities of the club.

Thanks to Rosie's long story of PPRAA operations during the California earthquake, contributions from EC George Kowalski and from the RTTYers, there was so much news this month we had to extend Zero Beat to ten pages from its usual eight. Keep the contributions coming. It, of course, means more work, but we don't mind as long as a good newsy issue is the result.

---Frank, WØHWH

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ROSIE'S REPORTINGS

By Rosemarie Lewis, WAØMLN

-rr-

If you see a bright firetruck red pickup jeep it might be our EC George Kowalski, WØGCH. He might be on AREC biz or a search and rescue operation or trying to make a gas station before he runs out of gas.

-rr-

WAØKNH, Leawn, of Los Animas and WAØGLP, Paul, of Alamosa are heard regularly on two meter FM by the Springs two meter group.

-rr-

Newly appointed SEC (Section Emergency Coordinator) is WAØQOY, Kent Simcoe, 1534 W. 31st St., Loveland, Colo.

-rr-

For those of you who have requested where to write for information about becoming a short wave listener, write: Popular Electronics, Davis Zeff, 307 Michigan Ave. Chicago, Ill. 60600.

-rr-

I have a few of the new 610s on hand for renewal or modification of licenses. The new 610 went into effect July 1970 and the white ones are no longer accepted. The new ones are yellow and a letter to the FCC will get you one.

-rr-

WAØKXO, Dan's pet parrot likes to talk over the mike on two meter FM. . . smart bird . . . doesn't know the 1Ø code.

-rr-

New officers of the Pueblo Ham Club are: KØWZX, Mark Morris, President; KØWRL, Glenn Cox, Vice President (also a PPRAA member); WAØVTO, Hank Rael, Secretary-Treasurer. PPRAA member WAØWAD, Ollie Shriner, is publicity chair - woman.

-rr-

PPRAA members have been cordially invited to attend all Pueblo Ham Club meet-

ings, the third Monday of each month starting at 7:30 p.m. in the Community Room, Columbia Savings and Loan, corner of 5th and Santa Fe Ave. The March 15 program will feature PPRAA officers and Convention Committee.

-rr-

WAØHHO/ZL3HQ, John Summers, Jr., presented his father, WAØHHN, John Summers Sr., with a special plaque. It is a wood and bronze plaque depicting Operation Deepfreeze by symbols. John Jr., stationed in New Zealand, works for the U.S. Navy communications system connected with the McMurdo Sound operation.

-rr-

About the women's part of the convention: there will be a Saturday luncheon and fashion show and gifts and prizes. If any of the gals in the club have not been requested to help in the convention and wish to offer their help, contact me or Rhea Allison.

-rr-

WØTV, Cecil Wood, celebrates his 80 birthday March 5. Cecil got his first ticket in 1910 or 1912 from the Dept. of Commerce under the Navy at that time. For ID, amateurs used their initials. Cecil still has a copy of his licence 9TV issued in 1916.

-rr-

KØYGH, Eldon (Sonny) Sanders, PPRAA President 1963-64, retired from the Air Force June 1970 and now lives in Aurora, Colo. and plans to attend a PPRAA meeting in the near future, maybe this month.

-rr-

We'd like information about amateur activities in the Colorado Springs area in past years. It can be sent to me, 2018 W. Uintah, Colorado Springs 80904 or to Julian "Doc" Cornell, WØMCT, 721 Lansing Drive, Colorado Springs 80909. We need this information as soon as possible.

-rr-

YOUR help is needed to make the convention a success. How about volunteering as a member of one of the committees?

EXPLORER SPEAKER AT MEETING

(Continued from Page 1)

and their 11,000 pounds of food and equipment against the Antarctic wilderness, fighting the environment and studying land that no human foot had ever touched.

They did maintain constant radio contact and had three resupply flights. He also managed to talk by Amateur Radio from a station at McMurdo Sound with his wife who stayed in Colorado Springs during his venture into the Antarctic wastes.

With this venture to add to the regular PPRAA business at the March 10 meeting, this promises to be one of the most interesting of the club programs for some time.

Interested persons other than PPRAA members are also invited to attend the meeting to hear Dr. Lewis and see the slides of his activities during the expedition.

For your next month's planning purposes, the April 14 PPRAA meeting will be a tour of the main Mountain Bell plant and a chance to view the facilities in the main office building newly completed last year.

There will be more on this in the Zero Beat for April.

-o-o-o-o-

WANTED--12 meg crystal. Doug Wilson,
WA0VSL, Fone 63307376.

EARTHQUAKE ACTIVITIES

(Continued from Page 1)

Wednesday found WA0VTU back in operation at 7 a.m. Red Cross workers and volunteers were busy answering the many fone calls. The map supplied information to the callers about a general area and times this was sufficient. In other cases a health and welfare report request was written. It was a must to have a fone number of the person in California as it was determined by prefix if the call could be accepted.

By Wednesday noon, H&Ws were being accepted and the good news "all OK" received from some H&W reports prompted some grateful people to call a local broadcast station during their public service program. This netted us some publicity along with some more H&Ws.

Wednesday's operators were WA0ERA, Eldon; WA0MBL, Rosemarie; W0LKD, Bill King and WA0KXO, Dan Remy. (I think there were a couple more whose names and calls I do not have. Please let me know, I'd like to have a record of names.)

Thursday our WA0VTU was active again and things were progressing real well until about 1:30 when we got the word the government services were taking over the fone lines. The band was quiet for hours. At this time an RTTY attempt was made.

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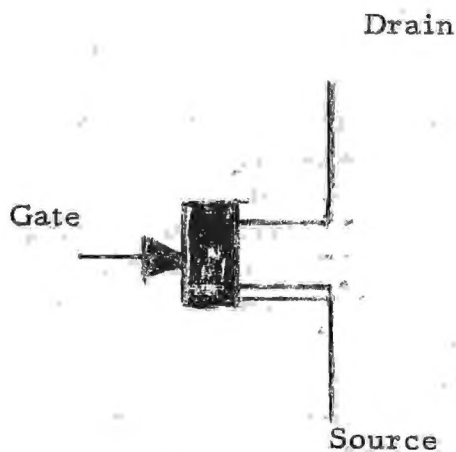
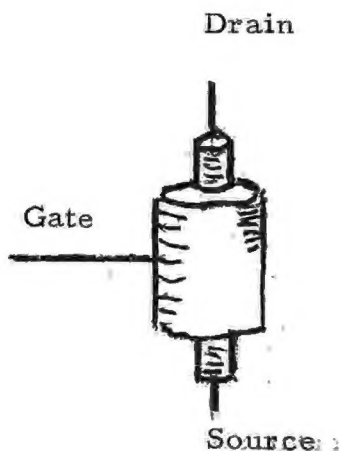
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UNDERSTANDING TRANSISTORS By Jim White, WB6RAG
 (From the Tulare County (Calif.) Radio Club "Gridleak"
 via the Central California Radio Council "Circle")
 LESSON 19

METAL-OXIDE SEMI-CONDUCTOR FIELD EFFECT TRANSISTORS (MOSFET)



In the MOSFET, the gate is insulated from the channel by a thin layer of oxide. This insulation prevents the current flow to gate, whether it is positive or negative with respect to the source. In the N channel type, the active element has an abundance of electrons or negative current carriers which of course is limited by the nature of the semi-conductor material. At opposite ends of the N channel material connections are made, one if called the source and the other the drain. Current can flow in either direction depending upon which way the battery or source of power is connected. This channel device is somewhat similar to a thousand ohm resistor.

Another element is positioned between the source and the drain, it is called the gate. Like any other gate, it can be completely open or shut or any position in between. If the gate is connected to the source terminal, current will flow just as if the gate was permanently open, the only restriction being the resistance of the semi-conductor material and the circuit. When a negative bias voltage is placed between the gate and the source, the current flow

between the source and the drain decreases, now the device acts more like a five thousand ohm resistor than a thousand ohm resistor.

If the negative voltage on the gate is increased sufficiently, current flow is completely pinches-off between source and drain.

There is no gate current flow in this transistor. The flow of current between source and drain is controlled simply by the voltage charge and this is very similar to the vacuum tube and like the tube it has a high impedance and requires no power in the input to control the power in the output.

OHMMETER TESTING: MOSFET are not easily checked with an ohmmeter but you can determine which is the drain, source and gate terminals. The gate terminal is a complete open circuit to either of the other two leads. A word of caution--the oxide insulation used in a MOSFET is very easily damaged by static electricity and should be stored with the leads twisted together and should be installed in the circuit before removing the short from the leads.

PRESIDENT'S LINES

Thanks to all for the splendid turnout at the auction. As usual, the auctioneers were in good voice. If you have an item you didn't sell, try a Zero Beat want ad--at no charge.

Section 97.1 of FCC rules, stating the reason for the existence of Amateur Radio --reads as follows:

"Recognition and enhancement of the value of the Amateur Service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications."

This rule tells us of a recognized situation, many times Amateur Radio has been the only link into a certain area during a disaster. With our modern communications system, many amateurs feel that our usefulness in an emergency is no longer needed. This is not true, as was evident during the California earthquake.

My sincere thanks to all of you who contributed your time at the Red Cross and via your home stations.

All of the work involved in this type situation is not on the air operation, so whatever your class of license, or even if you don't have one, we need you.

-O-

Do we need to update our AREC system so we'll know who is available in time of

need? Also certain employers allow administrative leave for such a crisis as we had, if you spend the time providing communications. You might wish to inquire into that. So join in helping in time of need --you'll appreciate your part in amateur radio even more and we'll be prepared for the next emergency, when and where it may be.

Thanks to Ed Pompea, KØZPG, for the great job he has done as our ARRL Assistant Director. Ed felt with the convention and to get more people involved in club activities, he'd not take on the job if someone else was inclined to take it over. WØKWV, Irvin Ebel, has promised to give the position a try. (Tnx Irv!!)

See you all at the March 10 meeting.

73 -O-O-O-O- Rosie, WAØMNL

-O-O-O-O-

FOR SALE--Drake TR-4 station, with MS-4, AC-4 SWR, matching mike, bug and other accessories. \$550. Russell Geoffrey WAØVSN. 2003 N. Tejon. Fone 635-8183.

-O-

FOR SALE--DX-40. Good novice rig. Doug Wilson, WAØVSL. Fone 633-7376.

-O-

WANTED--Teletype. Doug Wilson.

-O-O-O-

Be sure to attend (and maybe bring a friend) to hear a good program March 10.

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PLANS FOR JUNE 19-20 ARRL CONVENTION HERE SHAPING UP

Plans are shaping up well for the 1971 Rocky Mountain Division ARRL convention to be held here in the Springs June 19-20, according to Ed Pompea, KØZPG, one of the co-chairmen for the affair.

The convention will not, as originally planned and previously announced in Zero Beat, be held in the City Auditorium, site of the 1966 convention. Instead it will be held in the Antlers Plaza Hotel.

The convention will be held in the grand ballroom and several adjoining meeting rooms at the Antlers and a Saturday luncheon and fashion show and other activities for the women will be held in the Colorado Room on the first floor of the hotel. In addition there will be three rooms on the fifth floor available for special business meetings, according to Ed.

There will be an open house Friday evening during which time final arrangements will be made and distributors can set up their displays for the convention.

Meetings and programs, which will be announced in future Zero Beats, will take place Saturday and Sunday, with the final event the big Sunday banquet at which the convention prizes will be awarded. The main prize, not yet announced, will go only to a licensed amateur radio operator.

One of the features of the convention, a feature which attracted much interest at the 1966 convention held here, will be a "Swap and Shop" section where persons may place items for sale or look for items they might want to purchase.

Registration cost for the convention will be: Pre-registration (prior to June 1) \$4 per person. After that date registration will be \$5 per person.

Committee chairmen now working on details of the convention are Ed Pompea, KØZPG, programs; Pete Demario, KØUDG, prizes; Bill King, WØLKD, and Rosemarie Lewis, WAØMNL, registration; Rhea All-

EARTHQUAKE ACTIVITIES

(Continued from Page 5)

Thursday evening, this opened up with good communications in the major disaster area and a lot of H&Ws were cleared from home stations.

Thursday ops were WAØERA, Eldon; WAØMNL, Rosemarie; WBØCQB, Robert Ripple; KØUDG, Pete Demario and WØCBX, Claire Schisler.

WAØVTU, along with the home station, was busy Friday with activities diminishing in the evening and activity from then on was from the Lewis QTH. On Saturday, California amateurs sent mobiles into areas to check out H&Ws.

The Red Cross was pleased with the communications provided and I am proud of the amateurs and their devoted service. I wish to mention here that a lot of messages were handled from home stations that we do not know about, as well as the effort and FB job of those picking up traffic out of California. Nets made extra scheds just for this purpose.

And here, last but not least, is mention of the Red Cross workers and volunteers--they spent many hours on this and though at times they must have felt the pressure, they always respected our judgement of why that prefix could not be contacted, etc. For their neat writing on the forms and their all around courtesy and patience.

One remark heard was "There sure is a lot of whiskey talk coming out of that rad-

(Continued on Page 9)

ison, K5RDY/Ø, ladies' activities, and Ida Demario, WAØMTA, finances.

PPRAA members will soon be called upon by these committee heads to assist in the making of arrangements for the convention. However, any member who wishes to volunteer in advance for work on any particular committee may contact the committee head at any time and offer his or her services.

EC COLUMN

"By George"

Problems pointed up by the LA earthquake (and amplified since by the COD alert fiasco and Mississippi tornados) are that of early notification of the EC and centralization of accurate information. It is sometimes embarrassing for an EC to be asked at work (or called by the Red Cross): "What are you doing on the emergency in Podunk?" and have to answer "dunno."

The Pikes Peak area is rather unique in that most of us are imports. It seemed as if everyone has a friend or relative in the LA area and Red Cross handled (through our club station WAØVTU) more than 500 formal inquiries in that disaster.

Our local AREC emergency plan (long overdue for re-publication) states that requests for disaster information should be routed through the proper authorities and also that the EC should be notified immediately if you have any information of an emergency which could possibly affect us.

Call me at home - 596-0164 or at work - 596-2000.

---George, WØGCH

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EARTHQUAKE ACTIVITIES

(Continued from Page 8)

io room Whiskey talk?? Maybe the phonetics sound that way, but it helped get the job done.

For a time the Lewis QTH seemed like a disaster or headquarters thereof. Seems folks know of 'em hams and we received many calls here. In fact, if Eldon and I were gone we had to take the fone off the hook while we were handling traffic. The times we both operated out of the Red Cross Jerry would refer folks to the Red Cross.

He had one dissatisfied "customer." One lady called and said she was inquiring about a California message and asked to whom she was speaking. Jerry replied "Jerry Lewis," and she slammed the fone down. I hope she didn't call the King home and get Allan, cuz she's probably thinking

-- MARK AND SPACE NEWS --

This will report the first official RTTY on the air meeting of the PPRAA on February 23 at 0300 on 7.091mHz.

Those attending were WØHFX, Paul Snowden; WØITU, Don Carlos; WØHNI, Bill Berendt; KØUDG, Pete Demario; WAØVQM, Howard Fasold, and WAØYVS, Harlan Park.

The ball got started rolling with Paul (master of ceremonies because he can send the fastest) sending out the space signal so so we all could get lined up the same on 28.090 mHz. This band proved to be unsatisfactory so all agreed to move to 7.091 mHz.

Things went along fine, considering our first attempt. We had a little shift, weak signals, slightly off frequency, etc. Most all troubles were cleared up in a very short time. Everybody had a good time and an excellent job well done. Think we got good experience out of this first run and we will have a better idea of what we might run in to next time we operate in these meetings.

The next meeting was scheduled for Tuesday, March 2, at 0300 (MZBT) (Mark Zero Beat Time) on 7.091mHz

We would like to hear from all RTTY Hams and they are invited to join in the fun on the air. If you would like more information, call Harlan Park, WAØYVS, 597-1300. Come on you all, am sure it won't be long at all and we will see Jim Reynolds, WØJMB; Bob Collier, WØBUI; Fred LaPlante WA1DLZ/0; John Summers, WAØHHN, and others reporting in.

Any ideas or suggestions will be appreciated--meetings, time, dates, frequencies, etc., will have to be worked out to the satisfaction of all concerned.

"So Come On In And Join The Fun."

"what a bunch of hams." That's what I say, "What a bunch of hams! Makes me proud to be one of them.

I figure we helped answer about 500 inquiries and about 200 H&Ws and of course
(Continued on Page 10)

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EARTHQUAKE ACTIVITIES

(Continued from Page 9)

many had to be run through many times. The stations in California are terrific and were operating on 24 hour schedules.

In appreciation of the communications work done by PPRAA members during the disaster period, the following letter was sent to the PPRAA by the Pikes Peak Chapter, American Red Cross.

"It is due to the outstanding and tireless work of the members of the Pikes Peak Radio Amateur Association that the Pikes Peak Chapter of the American Red Cross is able to carry on its mandatory duties dur-

ing the time of disaster.

"Without the tremendous skills and devotion of you dedicated radio operators many many families in our area would spend days in worry and distress over their loved ones living in disaster struck areas. This California quake was particularly grueling and more than 400 inquiries were dispatched by members of your organization.

"Sincerely we extend heartfelt gratitude for your efforts, your successes, your outstanding interest and your wonderful quality of caring about others.

"The staff and volunteers of the Pikes Peak Chapter, American National Red Cross."

ZERO BEAT EDITOR

PIKES PEAK RADIO AMATEUR ASSN., Inc.

1142 Rainier Drive

Colorado Springs, Colorado 80910